DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AIR QUALITY OPERATING PERMIT

Permit No. 494TVP01 Issue Date: July 25, 2002
Application No. 494 Expiration Date: August 27, 2007
Administrative Revision 1: August 27, 2003

The Department of Environmental Conservation, under the authority of AS 46.14 and 18 AAC 50, issues an operating permit to the Permittee, **Copper Valley Electric Association, Inc.**, for the operation of the **CVEA Cogeneration Project**.

This permit satisfies the obligation of the owner and operator to obtain an operating permit as set out in AS 46.14.130(b).

As required by AS 46.14.120(c), the Permittee shall comply with the terms and conditions of this operating permit.

This Operating Permit becomes effective August 26, 2002.

Cynthia Espinoza, Supervisor

Air Operating Permits

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Table of Contents

List of Abbreviations Used in this Permit

AAC .....Alaska Administrative Code
ADEC.....Alaska Department of Environmental Conservation
AS .....Alaska Statutes
ASTM .....American Society for Testing and Materials
C.F.R. .....Code of Federal Regulations
COMS .....Continuous Opacity Monitoring System
dscf.....Dry standard cubic feet
EPA .....US Environmental Protection Agency
gr./dscf .....grain per dry standard cubic feet (1 pound = 7000 grains)
GPH.....gallons per hour
HAPs .....Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)]
ID .....Source Identification Number
kPa.....kiloPascals
LSR .....Light straight run naphtha
MACT .....Maximum Achievable Control Technology
NESHAPs .....Federal National Emission Standards for Hazardous Air Pollutants [as defined in 40 C.F.R. 61]
NSPS .....Federal New Source Performance Standards [as defined in 40 C.F.R. 60]
ppm .....Parts per million
PS .....Performance specification
PSD .....Prevention of Significant Deterioration
RM .....Reference Method
SIC. .....Standard Industrial Classification
SO_2 .....Sulfur dioxide
TPH .....Tons per hour
TPY .....Tons per year
VOC .....volatile organic compound [as defined in 18 AAC 50.990(103)]
wt% .....weight percent

Section 1. Identification

Names and Addresses

Permittee:	**Copper Valley Electric Association, Inc.** P.O. Box 45 Glennallen, Alaska 99588
Facility:	**CVEA Cogeneration Project**
Location:	61˚ 08′ 07″ North; 146˚ 21′ 12″ West
Physical Address:	2.5 Mile Dayville Road Valdez, Alaska 99686
Owner:	Copper Valley Electric Association, Inc. P.O. Box 45 Glennallen, Alaska 99588
Operator:	Same as Owner
Permittee's Responsible Official	Steven A. Bushong, Chief Operating Officer P.O. Box 927 Valdez, Alaska 99686 (907) 835-4301
Designated Agent:	Jamie Linxwiler 510 L Street #700 Anchorage, Alaska 99501 (907) 793 2200
Facility and Building Contact:	Steve Bushong, Chief Operating Officer P.O. Box 927 Valdez, Alaska 99686 (907) 835-4301 Bushong@cvea.org
Fee Contact:	Steve Bushong, Chief Operating Officer
SIC Code of the Facility:	4911 - Electrical Services

[18 AAC 50.350(b), 1/18/97]

Section 2. General Emission Information

Emissions of Regulated Air Contaminants, as provided in the Permittee's application:

Nitrogen oxides (NO_x), carbon monoxide (CO), particulate matter (PM-10), volatile organic compounds (VOCs), sulfur oxides (SO_x), and hazardous air contaminants (HACs).

Operating Permit Classifications:

1. 18 AAC 50.325(b)(1)
2. 18 AAC 50.325(b)(3)

Facility Classifications as described under 18 AAC 50.300(b)-(f):

1. None

[18 AAC 50.350(b), 1/18/97]

Section 3. Emission Fees

1. Assessable Emissions. The Permittee shall pay to the department an annual emission fee based on the facility's assessable emissions as determined by the department under 18 AAC 50.410. The assessable emission fee rate is set out in 18 AAC 50.410(b). The department will assess fees per ton of each air contaminants that the facility emits or has the potential to emit in quantities greater than 10 tons per year. The quantity for which fees will be assessed is the lesser of

1.1 the facility's assessable potential to emit of 406 tpy; or

1.2 the facility's projected annual rate of emissions that will occur from July 1 to the following June 30, based upon actual annual emissions emitted during the most recent calendar year, when demonstrated by

a. an enforceable test method described in 18 AAC 50.220;

b. material balance calculations;

c. emission factors from EPA's publication AP-42, Vol. I, adopted by reference in 18 AAC 50.035; or

d. other methods and calculations approved by the department**.**

[18 AAC 50.346(a)(1), 5/3/02]

2. Assessable Emission Estimates. Emission fees will be assessed as follows:

2.1 No later than March 31 of each year, the Permittee may submit an estimate of the facility's assessable emissions to ADEC, Air Permits Program, ATTN: Assessable Emission Estimate, 410 Willoughby Ave., Juneau, AK 99801-1795**;** the submittal must include all of the assumptions and calculations used to estimate the assessable emissions in sufficient detail so the department can verify the estimates, or

2.2 If no estimate is received on or before March 31 of each year, emission fees for the next fiscal year will be based on the potential to emit set forth in condition 1.1.

[18 AAC 50.346(a)(1), 5/3/02]

Section 4. Source Inventory and Description

Sources listed below have specific monitoring, record keeping, or reporting conditions in this permit. Source descriptions and ratings are given for identification purposes only.

Table 1. Source Inventory

ID	Source Name	Source Description	Rating/size	Install Date
1	Solar Taurus 60 Turbine	Generator Drive	5300 kW	1999
2	Caterpillar Diesel Engine	Black Start Generator Drive	250 kW	1999

Section 5. Source-Specific Requirements

Fuel-Burning Equipment

3. **Visible Emissions.** The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from Source ID(s) 1 – 2 listed in Table 1 to reduce visibility through the exhaust effluent by either

a. greater than 20% for more than three minutes in any one hour [1], or

[18 AAC 50.055(a)(1), 1/18/97, 40 CFR 52.70, 11/18/98]

b. more than 20% averaged over any six consecutive minutes.

[18 AAC 50.055(a)(1), 5/3/02]

3.1 For Source ID 1, monitor, record and report according to Section 13.

3.2 For Source ID 2, monitoring shall consist of an annual compliance certification under condition 43.

[18 AAC 50.350(g) – (i), 1/18/97 & 18 AAC 50.350(d)(1)(C), 6/21/98 & 18 AAC 50.346(c), 5/3/02]]

4. **Particulate Matter Emissions.** The Permittee shall not cause or allow particulate matter emitted from Source ID(s) 1 - 2 to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

4.1 For Source ID 1, monitor, record and report according to Section 13.

4.2 For Source ID 2, monitoring shall consist of an annual compliance certification under condition 43.

[18 AAC 50.055(b)(1) & 350(g) – (i), 1/18/97 & 18 AAC 50.350(d)(1)(C), 6/21/98 & 18 AAC 50.346(c), 5/3/02]]

5. **Sulfur Compound Emissions.** The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from Source ID(s) 1 - 2 to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 1/18/97; 18 AAC 50.350(d)(1)(C), 6/21/98]

[1] For purposes of this permit, the "more than three minutes in any one hour" criterion in this condition and condition 16.1 will no longer be effective when the Air Quality Control (18 AAC 50) regulation package effective 5/3/02 is adopted by the U.S. EPA. The six-minute average standard is enforceable only by the state until 18 AAC 50.055(a)(1), dated May 3, 2002, is approved by EPA into the SIP at which time this standard becomes federally enforceable.

5.1 Diesel and Jet A Fuel:

a. Obtain a statement or receipt from the fuel supplier for each fuel shipment received that indicates the fuel sulfur content or grade of fuel. If a statement or receipt is not available from the supplier, then analyze a representative sample of the fuel to determine the sulfur content using ASTM method D129-00, D1266-98, D1552-95, D2622-98, D4294-98, D4045-99.

b. Report under condition 40 whenever fuel combusted causes sulfur compound emissions to exceed the standard of condition 5. When reporting under this condition, include a material balance calculation of the sulfur compound emissions, in ppm of SO_2, expected from this fuel, made using the equations in Section 15.

c. Maintain records of the fuel sulfur content or the fuel grade of each shipment required under condition 5.1a and record all material balance calculations required under condition 5.1b.

d. Submit a summary of the records required by condition 5.1c with the facility operating report under condition 42.

5.2 LSR Fuel:

a. Monitor, record, and report according to the requirements in condition 12.

b. Report under condition 40 whenever the sulfur content exceeds 0.75% by weight.

[18 AAC 50.350(g) - (i) & 410(c), 1/18/97]

Federal New Source Performance Standards, Subpart A (Source ID 1)

6. Maintain records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of Source ID 1, any malfunctions of associated air-pollution control equipment, and any periods during which a continuous monitoring system or monitoring device for Source ID 1 is inoperative.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Citation: 40 C.F.R. 60.7(b), 7/1/99]

7. Good Air Pollution Control Practice. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate Source ID 1 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance records, and inspections of Source ID 1.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Citation: 40 C.F.R. 60.11(d), 7/1/99]

8. The Permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of a standard set forth in conditions 10 or 11. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[18 AAC 50.040(a)(1), 7/2/00]
[Federal Citation: 40 C.F.R. 60.12, 7/1/99]

Burning Used Oil in Sources

9. The Permittee shall not burn any used oil at the Cogeneration facility.

[18 AAC 50.335(g), 1/18/97, 18 AAC 50.055(b)(1), 6/21/98, & 18 AAC 50.110, 5/26/72]

Turbine Subject to NSPS Subpart GG (Source ID 1)

10. The corrected exhaust gas concentration of NO_x from Source ID 1 shall not exceed 190 ppmv.

[18 AAC 50.040(a)(2)(V), 7/2/00]
[Federal Citation: 40 CFR 60.332(a), 7/1/99]

10.1 Monitor NOx and O_2 emissions of Source ID 1 by conducting source tests no less than once every year during the life of this permit, when burning LSR fuel.

[18 AAC 50.335(g), 1/18/97]
[Federal Citation: 40 CFR 60.335, 7/1/99]

10.2 Monitor, record and report according to Section 9.

10.3 Report per condition 40 when the emission limit in condition 10 is exceeded.

[18 AAC 50.350(g) - (i), 1/18/97]

11. The Permittee shall not burn fuel in Source ID 1 with a sulfur content that exceeds 0.8 percent by weight.

11.1 Monitor, record, and report according to condition 12.

[18 AAC 50.350(g-i), 1/18/97 &18 AAC 50.040(a)(2)(V), 7/2/00 & Federal Citation: 40 CFR 60.333(b), 7/1/99]

12. Permittee shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine.

12.1 Sulfur Monitoring -

a. Copper Valley or its supplier, Petro Star Valdez Refinery (PSVR), shall sample the Light Straight Run (LSR) fuel on a quarterly basis so long as the concentration remains consistently and significantly below 0.8 percent by weight.

12.2 Nitrogen Monitoring -

a. Copper Valley or its supplier, PSVR, shall sample the LSR fuel on a quarterly basis so long as the concentration remains below 0.015 percent by weight.

12.3 Test Methods -

a. Copper Valley or its supplier, PSVR, shall utilize test methods prescribed in Subpart GG to determine the sulfur and nitrogen concentration of the LSR fuel. The use of ASTM D 4294-90 and ASTM 4629-91 is also allowed to determine the concentration of sulfur and nitrogen, respectively.

12.4 Recordkeeping -

a. Copper Valley shall maintain records of all sulfur and nitrogen monitoring data.

b. Copper Valley shall maintain a record documenting a constant supplier or source of fuel. A substantial change in fuel quality shall be considered as a change in fuel supply.

c. Copper Valley shall maintain a record of all turbine operation on fuels other than LSR.

d. Copper Valley shall maintain records on-site for a period of 5 years from the generation of such record.

12.5 Reporting - The Permittee shall submit the information described in this condition 12.5 to EPA and the department in accordance to condition 41:

a. Copper Valley shall annually report results of all sulfur and nitrogen monitoring.

b. Copper Valley shall report any changes in supplier or source of fuel within 60 days of such a change.

c. Copper Valley shall report use of any fuel other than LSR within 60 days of such use.

[Alternative Schedule, EPA, 9/17/99]

13. The Permittee shall burn Jet A and diesel fuel only during startup, shutdown, or malfunction of Source ID 1.

13.1 Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of Source ID 1.

[18 AAC 50.335(g), 1/18/97]

13.2 Records shall be available to the department upon request.

[18 AAC 50.350(g) - (i), 1/18/97]
[Federal Citation: 40 CFR 60.7(b), 7/1/99]

Section 6. Owner Requested Limits

14. The Permittee shall restrict operation of Source ID 2 to no more than 1,000 hours per consecutive twelve-month period.

[18 AAC 50.335(g), 1/18/97]

14.1 Maintain a log of hours operated each month. Calculate monthly the total hours operated over the preceding consecutive twelve-month period.

14.2 Submit with each semiannual facility operating report, required by condition 42, a summary of the total operating hours for each consecutive twelve-month period ending in the reporting period.

14.3 Report under condition 40 any consecutive twelve-month period calculations that exceed the 1000 hours limit.

[18 AAC 50.350(g) - (i), 1/18/97]

Section 7. Insignificant Sources

This section contains the requirements that the Permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, recordkeeping, and reporting for insignificant sources that the department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally enforceable requirement.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to insignificant sources.

15. For Source ID 2 and for sources at the facility that are insignificant as defined in 18 AAC 50.335(q)-(v) that are not listed on this permit, the following apply:

15.1 the Permittee shall submit the compliance certifications of condition 43 based on reasonable inquiry;

15.2 the Permittee shall comply with the requirements of condition 23;

15.3 the Permittee shall report in the operating report required by condition 42 if a source listed in this condition because of actual emissions less than the thresholds of 18 AAC 50.335(r) has actual emissions greater than any of those thresholds;

15.4 no other monitoring, record keeping, or reporting is required, except as stated in conditions 14.

[18 AAC 50.346(b)(1), 5/3/02]

16. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by either

16.1 greater than 20 percent for more than three minutes in any one hour[2], or,

[18 AAC 50.055(a)(1), 1/18/97, 40 CFR 52.70, 11/18/98]

16.2 more than 20% averaged over any six consecutive minutes.

[18 AAC 50.055(a)(1) & 346(c), 5/3/02]

17. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

18. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO_2, from an industrial process or fuel-burning equipment, to exceed 500 ppm averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

[2] See Footnote 1.

Section 8. Generally Applicable Requirements

19. Good Air Pollution Control Practice. The Permittee shall do the following for Source ID 2.

20.1 perform regular maintenance considering the manufacturer's or the operator's maintenance procedures;

20.2 keep records of any maintenance that would have a significant effect on emissions; the records may be kept in electronic format;

20.3 keep a copy of either the manufacturer's or the operator's maintenance procedures.

[18 AAC 50.346(b)(2), 5/03/02]

20. Dilution. The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a), 1/18/97]

21. Stack Injection. The Permittee shall not release materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the department.

[18 AAC 50.055(g), 1/18/97]

22. Open Burning. The Permittee shall not engage in any open burning activities at the Cogeneration facility.

[18 AAC 50.040(e), 7/2/00, 18 AAC 50. 335(g) & 18 AAC 50.065, 1/18/97]

23. Air Pollution Prohibited. No person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110; 5/26/72]

23.1 If emissions present a potential threat to human health or safety, the Permittee shall report any such emissions according to condition 40.

23.2 As soon as practicable after becoming aware of a complaint that is attributable to emissions from the facility, the Permittee shall investigate the complaint to identify emissions that the Permittee believes have caused or are causing a violation of condition 23.

23.3 The Permittee shall initiate and complete corrective action necessary to eliminate any violation identified by a complaint or investigation as soon as practicable if

a. after an investigation because of a complaint or other reason, the Permittee believes that emissions from the facility have caused or are causing a violation of condition 23; or

b. the department notifies the Permittee that it has found a violation of condition 23.

23.4 The Permittee shall keep records of

a. the date, time, and nature of all emissions complaints received;

b. the name of the person or persons that complained, if known;

c. a summary of any investigation, including reasons the Permittee does or does not believe the emissions have caused a violation of condition 23; and

d. any corrective actions taken or planned for complaints attributable to emissions from the facility.

23.5 With each facility operating report under condition 42, the Permittee shall include a brief summary report which must include

a. the number of complaints received;

b. the number of times the Permittee or the department found corrective action necessary;

c. the number of times action was taken on a complaint within 24 hours; and

d. the status of corrective actions the Permittee or department found necessary that were not taken within 24 hours.

23.6 The Permittee shall notify the department of a complaint that is attributable to emissions from the facility within 24 hours after receiving the complaint, unless the Permittee has initiated corrective action within 24 hours of receiving the complaint.

[18 AAC 50.350(h) – (i), 1/18/97 & 18 AAC 50.346(a)(2), 5/3/02]

24. Technology-Based Emission Standard. If an unavoidable emergency, malfunction, or non-routine repair, as defined in 18 AAC 50.235, causes emissions in excess of a technology-based emission standard[3], the Permittee shall take all reasonable steps to minimize levels of emissions that exceed the standard. Excess emission reporting under condition 40 requires information on the steps taken to minimize emissions. The report required under condition 40 is adequate monitoring for compliance with this condition.

[18 AAC 50.235(a) & 18 AAC 50.350(f)(3), 1/18/97]

[3] *Technology-based emission standard* means a best available control technology standard (BACT); a lowest achievable emission rate standard (LAER); a maximum achievable control technology standard established 40 C.F.R. 63, Subpart B, adopted by reference in 18 AAC 50.040(c); a standard adopted by reference in 18 AAC 50.040(a) or (c); and any other similar standard for which the stringency of the standard is based on determinations of what is technologically feasible, considering relevant factors.

25. Permit Renewal. To renew this permit, the Permittee shall submit a complete application under 18 AAC 50.335 no sooner than February 27, 2006 and no later than February 27, 2007 to renew this permit**.**

[18 AAC 50.335(a), 1/18/97]

Section 9. General Source Testing and Monitoring Requirements

26. Requested Source Tests. In addition to any source testing explicitly required by the permit, the Permittee shall conduct source testing as requested by the department to determine compliance with applicable permit requirements.

[18 AAC 50.345(k), 5/3/02]

27. Operating Conditions. Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing

27.1 At a point or points that characterize the actual discharge into the ambient air; and

27.2 At the maximum rated burning or operating capacity of the source or another rate determined by the department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b) & 18 AAC 50.350(g), 1/18/97]

28. Reference Test Methods. The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:

28.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 60.

[18 AAC 50.040(a), 7/2/00, 18 AAC 50.220(c)(1)(A) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 60, 7/1/99]

28.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 C.F.R. 61.

[18 AAC 50.040(b), 18 AAC 50.220(c)(1)(B) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 61, 12/19/96]

28.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 C.F.R. 63.

[18 AAC 50.040(c), 7/2/00; 18 AAC 50.220(c)(1)(C) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 63, 7/1/99]

28.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Reference Method 9.

[18 AAC 50.030, 12/30/00; 18 AAC 50.220(c)(1)(D) & 18 AAC 50.350(g), 1/18/97]

28.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 C.F.R. 60, Appendix A.

[18 AAC 50.040(a)(4), 7/2/00 18 AAC 50.220(c)(1)(E) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 60, Appendix A, 7/1/99]

28.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 C.F.R. 51, Appendix M.

[18 AAC 50.035, 7/2/00; 18 AAC 50.220(c)(1)(F) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 51, Appendix M, 7/1/99]

28.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the department in accordance with Method 301 in Appendix A to 40 C.F.R. 63.

[18 AAC 50.040(c), 7/2/00, 18 AAC 50.220(c)(2) & 18 AAC 50.350(g), 1/18/97]
[Federal Citation: 40 C.F.R. 63, Appendix A, Method 301, 7/1/99]

29. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 68° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.220(c)(3), 50.350(g), 1/18/97 & 18 AAC 50.990(88), 5/3/02]

30. Test Deadline Extension. The Permittee may request an extension to a source test deadline established by the department. The Permittee may delay a source test beyond the original deadline only if the extension is approved in writing by the department's appropriate division director or designee.

[18 AAC 50.345(l), 5/3/02]

31. Test Plans. Except as provided in condition 34, before conducting any source tests, the Permittee shall submit a plan to the department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance and must specify how the source will operate during the test and how the Permittee will document that operation. The Permittee shall submit a complete plan within 60 days after receiving a request under condition 26 and at least 30 days before the scheduled date of any test unless the department agrees in writing to some other time period. Retesting may be done without resubmitting the plan.

[18 AAC 50.345(m), 5/3/02]

32. Test Notification. Except as provided in condition 34, at least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and the time the source test will begin.

[18 AAC 50.345(n), 5/3/02]

33. Test Reports. Except as provided in condition 34, within 60 days after completing a source test, the Permittee shall submit two copies of the results in the format set out in the "Source Test Report Outline," adopted by reference in 18 AAC 50.030. The Permittee shall certify the results in the manner set out in condition 36. If requested in writing by the department, the Permittee must provide preliminary results in a shorter period of time specified by the department.

[18 AAC 50.345(o), 5/3/02]

34. Test Exemption. The Permittee is not required to comply with conditions 31, 32 and 33 (Test Plans, Test Notifications and Test Reports) when the exhaust is observed for visible emissions under condition 52.

[18 AAC 50.345(a), 5/3/02]

35. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in conditions 4 and 17, the three-hour average is determined using the average of three one-hour test runs.

[18 AAC 50.220(f) & 18 AAC 50.350(g), 1/18/97]

Section 10. General Recordkeeping, Reporting, and Compliance Certification Requirements

36. Certification. The Permittee shall certify all reports, compliance certifications, or other documents submitted to the department and required under the permit by including the signature of a responsible official for the permitted facility following the statement: "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete." Excess emission reports must be certified either upon submittal or with an operating report required for the same reporting period. All other reports and other documents must be certified upon submittal. When certifying a compliance certification, the official's signature must be notarized.

[18 AAC 50.345(j), 5/3/02]

37. Submittals. Unless otherwise directed by the department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Ave., Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.350(i), 1/18/97]

38. Information Requests. The Permittee shall furnish to the department, within a reasonable time, any information the department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit or to determine compliance with the permit. Upon request, the Permittee shall furnish to the department copies of records required to be kept by the permit. The department may require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.345(i), 5/3/02]

39. Recordkeeping Requirements. The Permittee shall keep all records required by this permit for at least five years after the date of collection, including

39.1 Copies of all reports and certifications submitted pursuant to this section of the permit.

39.2 Records of all monitoring required by this permit, and information about the monitoring including

a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;

b. sampling dates and times of sampling or measurements;

c. the operating conditions that existed at the time of sampling or measurement

d. the date analyses were performed;

e. the location where samples were taken;

f. the company or entity that performed the sampling and analyses;

g. the analytical techniques or methods used in the analyses; and

h. the results of the analyses.

[18 AAC 50.350(h), 1/18/97]

40. Excess Emissions and Permit Deviation Reports.

40.1 Except as provided in condition 23, the Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit as follows:

a. in accordance with 18 AAC 50.240(c), as soon as possible after the event commences or is discovered, report

(i) emissions that present a potential threat to human health or safety; and

(ii) excess emissions that the Permittee believes to be unavoidable;

b. in accordance with 18 AAC 50.235(a), within two working days after the event commenced or was discovered, report an unavoidable emergency, malfunction, or nonroutine repair that causes emissions in excess of a technology based emission standard;

c. report all other excess emissions and permit deviations

(i) within 30 days of the end of the month in which the emissions or deviation occurs, except as provided in conditions 40.1c(ii); and

(ii) if a continuous or recurring excess emissions is not corrected within 48 hours of discovery, within 72 hours of discovery unless the department provides written permission to report under condition 40.1c(i); and

40.2 When reporting excess emissions, the Permittee must report using either the department's on-line form, which can be found at www.dec.state.ak.us/awq/excess/report.asp, or, if the Permittee prefers, the form contained in Section 16 of this permit. The Permittee must provide all information called for by the form that is used.

40.3 When reporting a permit deviation, the Permittee must report using the form contained in Section 16 of this permit. The Permittee must provide all information called for by the form.

40.4 If requested by the department, the Permittee shall provide a more detailed written report as requested to follow up an excess emissions report.

[18 AAC 50.346(a)(3), 5/03/02

41. NSPS Reports. The Permittee shall submit to the department copies of reports required by condition 12, as they apply to the facility as follows:

41.1 Copies of any NSPS reports submitted to the U.S. Environmental Protection Agency (EPA) Region 10 shall be attached to the facility operating report required by condition 42.

41.2 The Permittee shall notify the department and shall provide a written copy of any U.S. EPA granted waiver of the federal emission standards, record keeping, monitoring, performance testing, or reporting requirements, or approved custom monitoring schedules within 30 days after receipt of a waiver or schedule.

[18 AAC 50.040, 7/2/00 & 18 AAC 350(i)(2), 1/18/97]
[Federal Citation 40 C.F.R. 60, 7/1/99]

42. Operating Reports. During the life of this permit, the Permittee shall submit an original and two copies of an operating report by August 1 for the period January 1 to June 30 of the current year and by February 1 for the period July 1 to December 31 of the previous year. The period covered by the operating report starts with the issuance date of the operating permit.

42.1 The operating report must include all information required to be in operating reports by other conditions of this permit.

42.2 If excess emissions or permit deviations that occurred during the reporting period are not reported under condition 42.1, either

a. the Permittee shall identify

(i) the date of the deviation;

(ii) the equipment involved;

(iii) the permit condition affected;

(iv) a description of the excess emissions or permit deviation; and

(v) any corrective action or preventive measures taken and the date or dates of such actions; **or**

b. when excess emissions or permit deviations have already been reported under condition 40, the Permittee may cite the date or dates of those reports.

42.3 The operating report must include a listing of emissions monitored under condition 52 which trigger additional testing or monitoring, whether or not the emissions monitored exceed an emission standard. The Permittee shall include in the report

a. the date of the emissions;

b. the equipment involved;

c. the permit condition affected; and

d. the monitoring result which triggered the additional monitoring.

[18 AAC 50.346(b)(3), 5/3/02]

43. Annual Compliance Certification. Each year by March 31, and for reporting periods following issuance of this permit, the Permittee shall compile and submit to the department an original and two copies of an annual compliance certification report as follows:

[18 AAC 50.350(j), 1/18/97]

43.1 For each permit term and condition set forth in Section 3 through Section 10, and Section 13 including terms and conditions for monitoring, reporting, and recordkeeping:

[18 AAC 50.350(d)(4) & (j)(2)(B-D), 1/18/97]
[18 AAC 50.345(j), 5/3/02]

a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;

b. state whether compliance is intermittent or continuous;

c. briefly describe each method used to determine the compliance status; and

d. notarize the responsible official's signature.

43.2 Submit a copy of the report directly to the U.S. EPA-Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

Section 11. Standard Conditions Not Otherwise Included in the Permit

44. The Permittee must comply with each permit term and condition. Noncompliance with a permit term or condition constitutes a violation of AS 46.14, 18 AAC 50 and, except for those terms or conditions designated in the permit as not federally-enforceable, the Clean Air Act, and is grounds for

44.1 an enforcement action;

44.2 permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or

44.3 denial of an operating-permit renewal application.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(c), 5/3/02]

45. It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(d), 5/3/02]

46. Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of the permit.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(e), 5/3/02]

47. Compliance with permit terms and conditions is considered to be compliance with those requirements that are

47.1 included and specifically identified in the permit; or

47.2 determined in writing in the permit to be inapplicable.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(b), 5/3/02]

48. The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(f), 5/3/02]

49. The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(g), 5/3/02]

50. The Permittee shall allow the department or an inspector authorized by the department, upon presentation of credentials and at reasonable times with the consent of the owner or operator to

[18 AAC 50.350(j), 1/18/97]

50.1 enter upon the premises where a source subject to the permit is located or where records required by the permit are kept;

50.2 have access to and copy any records required by the permit;

50.3 inspect any facility, equipment, practices, or operations regulated by or referenced in the permit; and

50.4 sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.350(b)(3), 1/18/97 & 18 AAC 50.345(h), 5/3/02]

Section 12. Permit As Shield from Inapplicable Requirements

In accordance with AS 46.14.290, and based on information supplied in the facility application, this section of the permit contains the requirements determined by the department not to be applicable to the permitted facility.

51. Table 2, identifies the sources that are not subject to the specified requirements at the time of permit issuance. Some of the requirements listed below may become applicable during the permit term due to an invoking event, even though the requirement is deemed inapplicable at the time of permit issuance. The Permittee shall meet such requirements on a timely basis by submittal of a compliance schedule in accordance with 18 AAC 50.350(k).

Table 2. Permit Shields Granted.

FACILITY WIDE	
Non Applicable Requirements	**Reason for non-applicability**
40 C.F.R. 60 Subparts B, C, Ca, Cb, F, G, H, I, J, M, N, Na, O, S, T, U, V, W, X, Y, Z, AA, AAa, BB, CC, EE, HH, KK, LL, MM, NN, PP, QQ, RR, SS, TT, UU, VV, WW, XX, BBB, DDD, FFF, GGG, HHH, III, JJJ, KKK, LLL, NNN, OOO, PPP, QQQ, RRR, SSS, TTT, UUU, and VVV	Not an affected facility, operation, or industry.
40 C.F.R. 60 Subparts D, Da, Db, Dc, E, Ea, Eb, K, Ka, Kb, L, P, Q, R, DD, and AAA	No affected sources within facility
40 C.F.R. 61 Subparts B, C, D, E, F, H, I, J, K, L, N, O, P, Q, R, T, W, Y, BB, and FF	Not an affected facility, operation, or industry.
40 C.F.R. 61 Subpart M	Facility does not manufacture or contain asbestos.
40 C.F.R. 61 Subparts A and V	Per 40 CFR 61.01(c) and 61.240(b), a facility must be subject to a specific subpart of 40 CFR 61 to be subject to these subparts.
40 C.F.R. 63 Subparts F, G, M, O, R, T, W, X, Y, CC, DD, II, JJ, KK, and EE	Not an affected facility, operation, or industry.
40 C.F.R. 63 Subpart L, N, and Q	No affected sources within facility
40 C.F.R. 63 Subparts A and H	Facility must be subject to a specific subpart of 40 CFR 63 to be subject to these subparts.
40 C.F.R. 82 Subparts B and F	The Cogeneration Project does not contain any commercial or household appliances, nor are motor vehicles serviced at the Cogeneration Project.
18 AAC 50.050, Incinerator particulate standards	No affected sources within facility

FACILITY WIDE	
Non Applicable Requirements	**Reason for non-applicability**
18 AAC 50.055 Industrial Processes and Fuel-Burning Equipment; 50.055(a)(2) – (a)(9), (b)(2) – (b)(6), (d), (e), and (f)	No affected sources within facility
18 AAC 50.060, Pulp Mills	Not an affected facility, operation or industry.
18 AAC 50.065	No open burning of any kind is conducted at the facility.
18 AAC 50.070 Marine Vessels, visible emission standards	No affected sources within facility
18 AAC 50.075, Wood fired heating device emission standards	No affected sources within facility
18 AAC 50.085, Volatile liquid storage tank emission standards	Regulations only apply to tanks within the Port of Anchorage
18 AAC 50.090 Volatile liquid loading racks and delivery emission standards	Regulations only apply to facilities within the Port of Anchorage

Section 13. Visible Emissions and Particulate Matter Monitoring Plan

Visible Emissions Observations for Liquid Fuel

52. The Permittee shall observe the exhaust of Source ID 1 for visible emissions using the Method 9 Plan as described in condition 52.1.

Having demonstrated compliance with conditions 52.1a through 52.1c as indicated in the data provided by the Permittee, monitoring for visible emissions for Source ID 1 may start with the annual observations in condition 52.1d.

52.1 **Method 9 Plan.** For all 18-minute observations in this plan, observe exhaust, following 40 C.F.R. 60, Appendix A-4, Method 9, adopted by reference in 18 AAC 50.040(a), for 18 minutes to obtain 72 consecutive 15-second opacity observations.

a. First Method 9 Observation. Observe exhaust for 18 minutes within six months after the issue date of this permit.

b. Monthly Method 9 Observations. After the first Method 9 observation, perform 18-minute observations at least once in each calendar month that a source operates.

c. Semiannual Method 9 Observations. After observing emissions for three consecutive operating months under condition 52.1b, unless a six-minute average is greater than 15 percent and one or more observations are greater than 20 percent, observe emissions at least semiannually for 18 minutes.

Semiannual observations must be taken between four and seven months after the previous set of observations.

d. Annual Method 9 Observations. After at least two semiannual 18-minute observations, unless a six-minute average is greater than 15 percent and one or more individual observations are greater than 20 percent, observe emissions at least annually.

Annual observations must be taken between 10 and 13 months after the previous observations and must include at least three 18-minute sets of observations.

e. Increased Method 9 Frequency. If a six-minute average opacity is observed during the most recent set of observations to be greater than 15 percent and one or more observations are greater than 20 percent, then increase or maintain the 18-minute observation frequency for that source to at least monthly intervals, until the criteria in condition 52.1c for semiannual monitoring are met.

52.2 If the exhaust of Source ID 1 (turbine) is commingled with the exhaust of the crude heater from Petro Star Refinery (Source ID 1, permit No. 311TVP01), the opacity readings shall be observed from either the commingled stack or the stack of Source ID 1 (turbine) independently.

52.3 If the Method 9 observations in condition 53.1c of the commingled exhaust result in an 18-minute average opacity greater than 20 percent, conduct a Method 9 opacity test on the turbine stack (Source ID 1) within three days. If the follow-up opacity test results in an 18-minute average opacity greater than 20 percent, monitor and report according to conditions 55 and 56.

52.4 When reporting under conditions 54.2 or 56.1, the Permittee shall determine whether the cause of the violation is the Petro Star crude heater (Source ID 1, permit No. 311TV01) or Source ID 1 (turbine).

52.5 CVEA is relieved from monitoring the commingled crude heater/turbine stack once the permit for the Petro Star Refinery is issued, provided that Permit No. 311TVP01 contains a requirement for monitoring this combined stack.

53. Visible Emissions Recordkeeping. The Permittee shall keep records in accordance with this condition 53.

53.1 If using the Method 9 Plan of condition 52.1

a. the observer shall record

(i) the name of the facility, emissions source and location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet in Section 14;

(ii) the time, estimated distance to the emissions location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), plume background, and operating rate (load or fuel consumption rate) on the sheet at the time opacity observations are initiated and completed;

(iii) the presence or absence of an attached or detached plume and the approximate distance from the emissions outlet to the point in the plume at which the observations are made;

(iv) opacity observations to the nearest five percent at 15-second intervals on the Visible Emissions Observation in Section 14, and

(v) the minimum number of observations required by the permit; each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period;

b. to determine the six-minute average opacity, divide the observations recorded on the record sheet into sets of 24 consecutive observations; sets need not be consecutive in time and in no case shall two sets overlap; for each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24; record the average opacity on the sheet;

c. calculate and record the highest 18-consecutive-minute average observed.

54. Visible Emissions Reporting. The Permittee shall report visible emissions as follows:

54.1 include in each facility operating report under condition 42

a. for each source under the Method 9 Plan,

(i) copies of the observation results (i.e. opacity observations) for each source that used the Method 9 Plan, except for the observations the Permittee has already supplied to the department; and

(ii) a summary to include:

(A) number of days observations were made;

(B) highest six-minute average observed; and

(C) dates when one or more observed six-minute averages were greater than 20 percent;

b. a summary of any monitoring or record keeping required under conditions 52 and 53 that was not done;

54.2 report under condition 40:

a. the results of Method 9 observations that exceed an average 20 percent for any six-minute period; and

b. if any monitoring under condition 52 was not performed when required, report within three days of the date the monitoring was required.

[18 AAC 50.350(g) – (i), 1/18/97; 18 AAC 50.346(c), 5/3/02]

55. Particulate Matter Monitoring for Liquid-Fired Turbines. The Permittee shall conduct source tests on liquid-fired turbines, Source ID 1, to determine the concentration of particulate matter (PM) in the exhaust of a source in accordance with this condition 55.

55.1 Within six months of exceeding the criteria of condition 52.3, either

a. conduct a PM source test according to conditions 28 - 35; or

b. make repairs so that emissions no longer exceed criteria of condition 52.3 as confirmed in a Method 9 observation under load conditions comparable to those during the prior observation.

55.2 During each one-hour PM source test run, observe the exhaust for 60 minutes in accordance with Method 9, and calculate the average opacity that was measured during each one hour test run. Submit a copy of these observations with the source test report.

55.3 The PM source test requirement in condition 55.1a is waived for an emissions unit if a PM source test on that unit has shown compliance with the PM standard during this permit term.

56. Particulate Matter Reporting for Liquid-Fired Turbines. The Permittee shall report as follows:

56.1 report under condition 40

a. the results of any PM source test that exceeds the PM emissions limit; or

b. if the criteria of condition 52.3 was exceeded and the Permittee did not comply with either condition 55.1a or 55.1b, this must be reported by the day following the day compliance with condition 55.1 was required;

56.2 in each facility operating report under condition number 42, include

a. the dates, source ID(s), and results when an observed 18-minute average was greater than an applicable threshold in condition 52.3;

b. a summary of the results of any PM testing under condition 55; and

c. copies of any visible emissions observation results (opacity observations) greater than the thresholds of condition 52.3, if they were not already submitted.

[18 AAC 50.350(g) – (i), 1/18/97; 18 AAC 50.346(c), 5/0302]

Section 14. Visible Emissions Forms

Visible Emissions Field Data Sheet

Certified Observer: _____

Company: _____

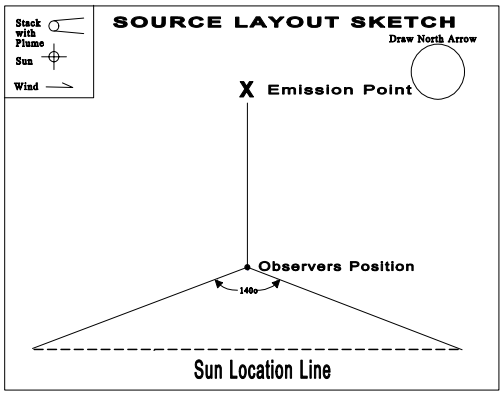
Location: _____

Test No.: _____ Date: _____

Source: _____

Production Rate, Operating Rate & Unit Operating Hours: _____

Hrs. of observation: _____



Clock Time	Initial				Final
Observer location Distance to discharge					
Direction from discharge					
Height of observer point					
Background description					
Weather conditions Wind Direction					
Wind speed					
Ambient Temperature					
Relative humidity					
Sky conditions: (clear, overcast, % clouds, etc.)					
Plume description: Color					
Distance visible					
Water droplet plume? (Attached or detached?)					
Other information					

Visible Emissions Observation Record

Page ___ of ___

Company _____ Certified Observer_____

Test Number _____ Clock time_____

Date:		Visibility reduction every 15 Seconds (Opacity)				Steam Plume (check if applicable)		Comments
Hr	Min	0	15	30	45	Attached	Detached	

Additional information:

_____
Observer Signature

Data Reduction:
Duration of Observation Period (minutes) _____
Number of Observations _____
Number of Observations exceeding 20% _____

Average Opacity Summary

Set Number	Time Start—End	Opacity	
		Sum	Average

Section 15. SO_2 Material Balance Calculation

If a fuel shipment contains more than 0.75 percent sulfur by weight, calculate the three-hour exhaust concentration of SO_2 using the following equations:

Diesel Fuel

A = 31,200 x [**wt%S_{fuel}**] = 31,200 x _____ = _____

B = 0.148 x [**wt%S_{fuel}**] = 0.148 x _____ = _____

C = 0.396 x [**wt%C_{fuel}**] = 0.396 x _____ = _____

D = 0.933 x [**wt%H_{fuel}**] = 0.933 x _____ = _____

E = B + C + D = _____ + _____ + _____ = _____

F = 20.9 − [**vol%$_{dry}O_{2,\ exhaust}$**] = 20.9 − _____ = _____

G = [**vol%$_{dry}O_{2,\ exhaust}$**] ÷ F = _____ ÷ _____ = _____

H = 1 + G = 1 + _____ = _____

I = E x H = _____ x _____ = _____

SO_2 concentration = A ÷ I = _____ ÷ _____ = _____ PPM

The **wt%S_{fuel}**, **wt%C_{fuel}**, and **wt%H_{fuel}** are equal to the weight percents of sulfur, carbon, and hydrogen in the fuel. These percentages should total 100%.

The fuel weight percent (wt%) of sulfur is obtained pursuant to condition 5.1. The fuel weight percents of carbon and hydrogen are obtained from the fuel refiner.

The volume percent of oxygen in the exhaust (**vol%$_{dry}O_{2,\ exhaust}$**) is obtained from oxygen meters, manufacturer's data, or from the most recent analysis under 40 C.F.R. 60, Appendix A-2, Method 3, adopted by reference in 18 AAC 50.040(a), at the same engine load used in the calculation.

Enter all of the data in percentages without dividing the percentages by 100. For example, if **wt%S_{fuel}** = 1.0%, then enter 1.0 into the equations not 0.01 and if **vol%$_{dry}O_{2,\ exhaust}$** = 3.00%, then enter 3.00, not 0.03.

[18 AAC 50.346(c), 5/3/02]

Section 16. ADEC Notification Form

Fax this form to: (907) 269-7508 Telephone: (907) 269-8888

Copper Valley Electric Association, Inc.
Company Name

CVEA Cogeneration Project
Facility Name

1. Reason for notification:

❑ **Excess Emission** ❑ **Permit Condition Deviation**

2. Event Information (Use 24-hour clock)**:**

	START Time**:** (hr:min):	**END** Time:	**Duration**
Date: _____	_____:_____	_____:_____	_____:_____
Date: _____	_____:_____	_____:_____	_____:_____
		Total:	_____:_____

3. Cause of Event (Check all that apply)**:**

❑ START UP ❑ UPSET CONDITION ❑ CONTROL EQUIPMENT
❑ SHUT DOWN ❑ SCHEDULED MAINTENANCE ❑ OTHER _____

Attach a detailed description of what happened, including the parameters or operating conditions exceeded.

4. Sources Involved:

Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary.

Source ID No.	Source Name	Description	Control Device

5. Emission Limit Exceeded and/or Permit Condition Deviation:

Identify each Emission Standard and Permit Condition potentially exceeded during the event. Attach a list of ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Permit Condition	Limit	Exceedance

6. Emission/Deviation Reduction:

Attach a description of the measures taken to minimize and/or control emissions or permit condition deviations during the event.

7. Corrective Actions:

Attach a description of corrective actions taken to restore the system to normal operation and to minimize or eliminate chances of a recurrence.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name: Signature: Date:

Alaska Department of Environmental Conservation

Air Permits Program

Copper Valley Electric Association, Inc.

CVEA Cogeneration Project

LEGAL AND FACTUAL BASIS

of the terms and conditions for

Permit No. 494TVP01

Prepared by Cynthia Espinoza and Grace Germain

Revised by Don Bodron

November 7, 2003

INTRODUCTION

This document sets forth the legal and factual basis for the terms and conditions of Operating Permit No. 494TVP01.

The CVEA Cogeneration Project is a facility that drives a generator with a gas turbine. The turbine exhaust gases are routed to the Petro Star Valdez Refinery's (PSVR) crude heater to be used as preheated combustion air. The electricity generated is routed to the grid. The facility is owned and operated by Copper Valley Electric Association, Inc. Copper Valley Electric Association, Inc. is the Permittee for the facility's operating permit.

PROCESS DESCRIPTION

As provided in the application, the facility contains a Solar Taurus 60 gas turbine that is used to drive a 5.3 MW generator. The turbine is designed to burn the following liquid fuels purchased from the PSVR, LSR, Jet A, and No. 2 diesel. LSR is the primary fuel for the turbine generator drive. The facility also has a 250 kW Caterpillar diesel engine-generator set for black start capabilities.

The sources at the facility regulated in Operating Permit 494TVP01 are identified in Table 1 in Section 4 of the permit.

SOURCE INVENTORY AND DESCRIPTION

Section 4 of Operating Permit No. 494TVP01 contains Table 1 describing the sources regulated by the permit. The table is provided for information and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

EMISSIONS

Table 1. Emissions Summary

Pollutant	NO_x	CO	PM-10	SO_2	VOC
Potential Emissions (TPY) per AS 46.14.990(21)	224	14	17	151	5
Assessable Potential to Emit (TPY) under condition 1.1	224	14	17	151	0

The potential emissions and emission factors were provided in the application. The Permittee used a turbine NO_x emission factor derived from test data (NO_x rate ~ 50 lb/hr @ 190 ppmv; heat rate ~ 63 MMBtu/hr). All other emissions were calculated with AP-42 emission factors. Fuel sulfur content was assumed 0.5% by weight.

The assessable potential to emit is simply those regulated air contaminants for which the facility has the potential to emit quantities greater than 10 tons per year.

BASIS FOR REQUIRING AN OPERATING PERMIT

CVEA Cogeneration Project requires an operating permit under 18 AAC 50.325(b)(1) because it has the potential to emit 100 tons per year (tpy) or more of a regulated air contaminant. Under 18 AAC 50.325(b)(3) because contains a source, Source ID 1, subject to one or more of the standards adopted by reference in 18 AAC 50.040(a) – (c). CVEA Cogeneration Project meets the definition of operating permit facility in the state regulations at Section 2. CVEA Cogeneration Project would be major for the Prevention of Significant Deterioration (PSD) under 18 AAC 50.300(c)(1), without the hour limit set out in condition 14. The limit allows CVEA Cogeneration Project to avoid a classification under 18 AAC 50.300.

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to CVEA Cogeneration Project, the state regulations require a description of:

Each incinerator, including a demonstration showing each requirement in 18 AAC 50.050, Incinerator Emissions Standards, that applies [18 AAC 50.335(e)(4)(A)];

Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment [18 AAC 50.335(e)(4)(C)];

Each source subject to a standard adopted by reference in 18 AAC 50.040 [18 AAC 50.335(e)(2)]; and

Sources subject to requirements in an existing DEC permit [18 AAC 50.335(e)(5)]

The emission sources at CVEA Cogeneration Project classified as "regulated sources" according to the above DEC regulations are listed in Table 1 of Permit No. 494TVP01.

CURRENT AIR QUALITY PERMITS

Previous Air Quality Permit to Operate

No previous air quality control permit-to-operate exists for this facility.

Construction Permits

No construction permits have been issued for this facility after January 18, 1997 (the effective date of the new divided operating and construction-permitting program).

Title-V Operating Permit Application History

The owner or operator submitted an application on March 26, 1999.

The owner or operator amended this application on December 28, 2000.

Additional information was received on March 9, 2001. An ex-parte meeting was held on July 16, 2001.

COMPLIANCE HISTORY

The facility has operated at its current location since 1999. Review of the permit files for this facility; indicate a facility generally operating in compliance with its operating permit, with the following exception. The first NO_x turbine source test failed compliance on LSR, Jet A, and diesel fuel at high loads. However some modifications were made to the turbine and the second turbine source test shows compliance.

LEGAL AND FACTUAL BASIS FOR THE PERMIT CONDITIONS

Conditions 1 - 2, Fee Requirements

Applicability: The regulations require all permits to include due dates for the payment of fees and any method the Permittee may use to re-compute assessable emissions.

Factual Basis: These conditions require the Permittee to pay fees in accordance with the department's billing regulations. The department's billing regulations set the due dates for payment of fees based on the billing date.

The conditions also set forth how the Permittee may recompute assessable emissions. If the Permittee does not choose to annually calculate assessable emissions, emissions fees may be paid based on "potential to emit."

As described in the last paragraph of Condition 5 of this Statement of Basis, the SO_2 PTE is based on fuel with a 0.5% by weight sulfur content.

Condition 3 & Section 13, Visible Emissions Standard

Applicability: The visible emission standard applies to operation of all fuel-burning equipment in Alaska. Source ID(s) 1 and 2 are fuel-burning equipment.

Factual basis: Condition 3 requires the Permittee to comply with the federal and the state visible emission standards applicable to fuel-burning equipment and incinerators. The Permittee shall not cause or allow the equipment to violate these standards.

This condition has recently been adopted into regulation as a standard condition.

Liquid Fired:

Monitoring – The visible emissions may be observed by either Method-9 or the Smoke/No Smoke plans. The Permittee chooses to use only Method 9 plan as detailed in

Section 13. Corrective actions such as maintenance procedures and either more frequent or less frequent testing may be required depending on the results of the observations. The seven months visible emissions data that the Permittee submitted to the department show compliance with the conditions to merit a reduced monitoring frequency of one Method 9 observations per year unless the criteria for annual observations in condition 52.1c are not met. In which case, the monitoring frequency shall be increased as set out in condition 52.1e.

Recordkeeping - The Permittee is required to record the results of all visible emission observations and record any actions taken to reduce visible emissions.

Reporting - The Permittee is required to report: 1) emissions in excess of the federal and the state visible emissions standard, 2) and deviations from permit conditions. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

The exhaust gas waste heat from Source ID 1 (the combustion turbine) supplies fuel to the crude heater of Petro Star Valdez Refinery (Source ID 1, Permit No. 494TVP01) constructed next to CVEA facility. If the exhaust of Source ID 1 is commingled with the exhaust of the crude heater, the department is requesting the Permittee to take opacity readings from either the commingled stack or the stack of Source ID 1 (turbine) independently.

If visible emission readings from the combined exhaust exceed the limit in condition 3, the Permittee will determine and identify the responsible source. CVEA shall take corrective action if its Source ID 1 is responsible for the exceedance.

For Source ID 2, the black start diesel engine, monitoring is waived in accordance with recently issued Department Guidance AWQ 02-014, Topic # 3, as long as the unit remains in compliance with its operating hours limit and the Permittee annually certifies compliance with the opacity standard. The Permittee provided data to demonstrate that Source ID 2 is insignificant based on actual emissions according to regulation 18 AAC 50.335(r).

Condition 4 & Section 13, Particulate Matter (PM) Standard

Applicability: This regulation applies to operation of all fuel-burning equipment in the State of Alaska.

Factual basis: Condition 4 requires the Permittee to comply with the state PM (also called grain loading) standard applicable to fuel-burning equipment. The Permittee shall not cause or allow fuel-burning equipment to violate this standard.

This condition has recently been adopted into regulation as a standard condition.

Liquid Fired:

Monitoring – The Permittee is required to conduct PM source testing if threshold values for opacity are exceeded as described in Section 13.

Recordkeeping - The Permittee is required to record the results of PM source tests.

Reporting - The Permittee is required to report: 1) incidents when emissions in excess of the opacity threshold values have been observed, 2) and results of PM source tests. The Permittee is required to include copies of the results of all visible emission observations with the facility operating report.

For Source ID 2, the black start diesel engine, monitoring is waived in accordance with recently issued Department Guidance AWQ 02-014, Topic # 3, as long as the unit remains in compliance with its operating hours limit and the Permittee annually certifies compliance with the opacity standard. The Permittee provided data to demonstrate that Source ID 2 is insignificant based on actual emissions according to regulation 18 AAC 50.335(r).

Condition 5, Sulfur Compound Emissions

Applicability: The sulfur emission standard applies to operation of all fuel-burning equipment in the State of Alaska. Source ID(s) 1 – 4 are fuel-burning equipment. The SIP standard for sulfur dioxide applies because it is contained in the federally approved SIP dated October 1983. Monitoring of sulfur dioxide emissions is accomplished by analysis of fuel sulfur content.

Factual basis: The condition requires the Permittee to comply with the sulfur emission standard applicable to fuel-burning equipment at a petroleum refinery. The Permittee may not cause or allow their equipment to violate this standard.

Diesel Fuel: Diesel fuel sulfur is measured in weight percent sulfur. Calculations show that fuel containing no more than 0.5% sulfur will always comply with the emission standard. This is true for all liquid hydrocarbon fuels, even with no excess air. Verification of ASTM fuel grade as No. 1, No. 2 or Jet A fuel oil will certify compliance with the standard because these fuel oils always have a fuel sulfur content of no more than 0.5%. For fuels with a sulfur content higher than 0.75%, this condition requires the Permittee to use the equations in Section 15 to calculate the exhaust gas SO_2 concentration, showing whether the standard was exceeded. The equations in Section 15 are all based on stoichiometric mass balance. The ADEC Air Permits website contains the supporting calculations at:

http://www.state.ak.us/dec/dawq/aqm/newpermit.htm

Condition 6 – 8, Federal New Source Performance Standards, Subpart A

Applicability NSPS Subpart A contains the general requirements applicable to all affected facilities (sources) subject to NSPS. Source ID 1 is subject to NSPS Subpart GG. In general, the intent of NSPS is to provide technology-based emission control standards. The department has incorporated by reference the NSPS effective July 1, 1999, for specific industrial activities, as listed in 18 AAC 50.040. However, EPA has not delegated to the department the authority to administer the NSPS program as of October 2, 2001.

Factual Basis: Conditions 6 - 8 require the maintenance of records of malfunctions of NSPS sources (Source ID 1) or pollution control or monitoring equipment. The conditions require that sources be operated in accordance with good air pollution control practices to minimize emissions. The conditions restate the prohibition against the use of gaseous

diluents to achieve compliance with an opacity standard. All of these requirements are from 40 C.F.R. 60 Subpart A.

Condition 9, Burning Used Oil in Sources

Applicability: Applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

Factual basis: This condition prohibits used oil burning. Staff experience indicates that burning used oil by itself may violate 18 AAC 50.055(b).

The department received a proposal from CVEA to prohibit burning of used oil at this facility.

Conditions 10 - 13, Turbine Subject to NSPS Subpart GG

Applicability: NSPS Subpart GG applies to stationary gas turbines with a heat input at peak load (maximum load at 60 percent relative humidity, 59 degrees F, and 14.7 psi) equal to or greater than 10.7 gigajoules per hour (10 MMBtu/hr), based on the lower heating value of the fuels fired and constructed, modified, or reconstructed after October 3, 1977. Source ID 1 was constructed/built/modified in 1999 and is therefore subject to NSPS Subpart GG.

Factual Basis: The U.S. Environmental Protection Agency (EPA) regulates New Source Performance Standards (NSPS). The intent of NSPS is to provide technology-based emission control standards. EPA may delegate to each state the authority to implement and enforce standards of performance for new stationary sources located in that state. The department has incorporated by reference the NSPS for specific industrial activities, as listed in 18 AAC 50.040. However, EPA has not delegated to the department the authority to administer the NSPS program at this time.

Condition 10, NOx Emissions Standard for Turbine Subject to NSPS Subpart GG

Applicability: Applies to sources subject to NSPS Subpart GG.

Factual basis: Turbines are affected facilities as classified in 40 CFR 60.330, Subpart GG, Standards of Performance for Stationary Gas Turbines, if constructed, modified, or reconstructed after October 3, 1977 and have heat input ratings greater than 10.7 gigajoules heat input per hour based on lower heating value of the fuel. NSPS standards impose additional emission limits on the affected facility's SO_2 and NO_X emissions.

Standards for Nitrogen Oxides:

The turbines are subject to 40 CFR 60.332(a)(2) because they are classified under 40 CFR 60.330(b) as affected facilities with heat input loads greater than 10 MMBtu/hr (10.7 gigajoules/ hr) and less than 100 MMBtu/hr (107.2 gigajoules/hr), and modified after October 3, 1982.

The NSPS NO_X standard under 40 CFR 60.332(a)(2) states that no owner or operator shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.015 * \frac{14.4}{Y} + F$$

Where: STD = allowable NO_X emissions, percent by volume at 15% O_2 and on a dry basis

Y = manufacturer's rated heat rate at manufacturer's rated peak load, kilojoules per watt hour, or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the affected facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

F = NO_X emission allowance for fuel-bound nitrogen, percent by volume, assumed to be zero for Alaskan fuels.

Conditions 11 - 12, Sulfur Compound and Nitrogen MR&R for Turbine Subject to NSPS Subpart GG

Applicability: Applies to sources subject to NSPS Subpart GG.

Factual Basis: Affected turbines are subject to the SO_2 standards as stated in 40 CFR 60.333. The owner or operator shall not discharge gases into the atmosphere from a stationary gas turbine with SO_2 in excess of 0.015% by volume (150 ppmvd) at 15% O_2 and on a dry basis, or no owner or operator shall burn fuel with greater than 0.8% sulfur by weight.

The Permittee shall maintain records of all sulfur monitoring data for five years as set out in 18 AAC 50.350(h)(5). The applicant shall maintain records documenting the fuel supplier or source. A substantive change in fuel quality shall be considered as a change in fuel supply.

The Permittee shall determine compliance with the sulfur dioxide standard per 40 CFR 60.335(d). The Permittee shall use methods described in this section—ASTM D 1072-80, D3031-81, D4084-82, or D3246-81, or EPA-approved alternative. The applicant may use fuel analysis performed by owner/operator, service contractor, fuel vendor, or other qualified agency pursuant to 60.335(f).

Condition 12 includes an alternative schedule for fuel sulfur and nitrogen determinations. The EPA Administrator approved the alternative monitoring schedule for Light Straight Run on September 17, 1999. This applies to the stationary gas turbine, Source ID 1, operated by Copper Valley Electric Association, Inc., and does not alter any of the other requirements of 40 C.F.R. Part 60, Subparts A and GG, which may apply to Copper Valley.

The conditions incorporate Federal test methods by reference.

Condition 13, Operational Limit based on Type of Fuel Burned in Source ID 1.

Applicability: Applies to sources subject to NSPS Subpart GG.

Factual Basis: The most recent (January 2001) source test results of Source ID 1 are at 98% of the applicable limit in condition 10 burning Jet A and diesel fuel. Because the results are close to the NO_X limit Copper Valley Electric Association, Inc. agreed to burn Jet A and

diesel fuel only during startup, shutdown, or malfunctions of Source ID 1 to comply with the 190 ppmv limit.

Condition 14, Owner Requested Limits

Legal Basis: [18 AAC 50.335(g) and 18 AAC 350(g) – (i), 1/18/97]

[40 CFR 60.8, 7/1/99]

Applicability: The Permittee proposed owner-requested limits (ORL), under 18 AAC 50.335(g) to avoid or comply with an air quality control requirement or federally-enforceable requirement, and to reduce the facility's potential to emit by limiting the hours of operation of Source ID 2.

Factual Basis: This condition set out limits requested by Copper Valley Electric Association, Inc. to avoid or comply with an air quality control requirement or a federally-enforceable requirement.

Copper Valley Electric Association, Inc. requested the limit for Source ID 2 to avoid PSD review.

Conditions 15 - 18, Insignificant Sources

Applicability: These general emission standards apply to all industrial processes fuel-burning equipment, and incinerators regardless of size.

Factual basis: The conditions re-iterate the general standards and require compliance for insignificant sources. The Permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping and reporting are necessary to ensure compliance.

In accordance with the recently adopted regulations, 18 AAC 50.346(b)(1), 5/03/02, standard operating condition for Insignificant Sources also applies to sources that do not have control equipment for complying with an emissions standard or reducing emissions below a threshold in 18 AAC 50.335(r). This case applies to Source ID 2, its MR&R being that the unit remains in compliance with its operating hours limit and an annual compliance certification.

Condition 19, Good Air Pollution Control Practice

Applicability: Applies to all sources, except NSPS regulated sources; i.e., Source ID 1.

Factual basis: The condition requires the Permittee to comply with good air pollution control practices for all sources.

Maintaining and operating equipment in good working order is fundamental to preventing unnecessary or excess emissions. Standard conditions for monitoring compliance with emission standards are based on the assumption that good maintenance is performed. Without appropriate maintenance, equipment can deteriorate more quickly than with appropriate maintenance. If appropriate maintenance is not applied to the equipment, the department may have to apply more frequent periodic monitoring requirements (unless the

monitoring is already continuous) to ensure that the monitoring results are representative of actual emissions.

The Permittee is required to keep maintenance records to show that proper maintenance procedures were followed, and to make the records available to the department. The department may use these records as a trigger for requesting source testing if the records show that maintenance has been deferred.

Condition 20, Dilution

Applicability: This state regulation applies to the Permittee because the Permittee is subject to emission standards in 18 AAC 50.

Factual Basis: The condition prohibits the Permittee from diluting emissions as a means of compliance with any standard in 18 AAC 50.

Condition 21, Stack Injection.

Applicability: Stack injection requirements apply to the facility because the facility contains a stack or source constructed or modified after November 1, 1982.

Factual Basis: The condition prohibits the Permittee from releasing materials other than process emissions, products of combustion, or materials introduced to control pollutant emissions from a stack (i.e. disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

Condition 22, Open Burning

Applicability: The open burning state regulation in 18 AAC 50.065 applies to the Permittee if the Permittee conducts open burning at the facility.

Factual Basis: The department received a proposal from CVEA to prohibit open burning at this facility.

Condition 23, Air Pollution Prohibited

Applicability: Air Pollution Prohibited requirements apply to the facility because the facility will have emissions.

Factual Basis: The condition prohibits the Permittee from causing any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can cause violations of this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

The Permittee is required to report any complaints and injurious emissions. The Permittee must keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for these complaints and to submit copies of these records upon request of the department.

The department will determine whether the necessary actions were taken. No corrective action are necessary if the complaint is frivolous or there is not a violation of 18 AAC 50.110, however this condition is intended to prevent the Permittee from prejudging that complaints are invalid.

Condition 24, Technology-Based Emission Standard

Applicability: Technology Based Emission Standard requirements apply to the facility because the facility contains equipment subject to a technology-based emission standard, such as BACT, MACT, NSPS or other "technologically feasible" determinations.

Factual Basis: This condition restates a regulation that requires the Permittee to take reasonable steps to minimize emissions if certain activity causes exceedance of a technology-based emission standard. Because the technology-based emission standard itself is a condition of the permit, the Permittee will report the excess emissions under condition 40. Because the excess emission report requires information on the steps taken to minimize emissions, this report is adequate monitoring for compliance with this condition.

Condition 25, Permit Renewal

Applicability: Applies if the Permittee intends to renew the permit.

Factual Basis: The condition restates the regulatory deadlines, citing the specific dates applicable to the facility. Submittal of the renewal application is sufficient monitoring, recordkeeping and reporting.

Condition 26, Requested Source Tests

Applicability: Applies because this is a standard condition to be included in all permits.

Factual Basis: Condition requires the Permittee to conduct source tests as requested by the department, therefore no monitoring is needed. Conducting the requested source test is its own monitoring.

Conditions 27 - 29, Operating Conditions, Reference Test Methods, Excess Air Requirements

Applicability: Applies when the Permittee is required to conduct a source test.

Factual Basis: These conditions restate regulatory requirements for source testing. As such, they supplement the specific monitoring requirements stated elsewhere in this permit. The tests reports required by later conditions adequately monitor compliance with these conditions, therefore no specific monitoring, reporting, or recordkeeping is needed.

Conditions 30 - 33, Test Deadline Extension, Test Plans, Notifications and Reports

Applicability: Applies when the Permittee is required to conduct a source test.

Factual Basis: Standard conditions 18 AAC 50.345(l) - (o) are incorporated through these conditions. Because these standard conditions supplement specific monitoring requirements

stated elsewhere in this permit, no MR&R is required. The source test itself is adequate to monitor compliance with this condition.

For condition 33 a summary of the source test results, which includes the potential to emit in tons/year of the major regulated air contaminants, is acceptable within 60 days pending the receipt of the entire report.

Condition 34, Test Exemption

Applicability: Applies when the source exhaust is observed for visible emissions.

Factual Basis: As provided in 18 AAC 50.345(a), 5/03/02, the requirements for test plans, notifications and reports do not apply to visible emissions observations by smoke readers, except in connection with required particulate matter testing.

Condition 35, Particulate Matter Calculations

Legal Basis: Applies when the Permittee tests for compliance with the particulate matter standard.

Factual Basis: The condition incorporates a regulatory requirement for particulate matter source tests. The Permittee must use a certain equation to calculate the particulate-matter emission concentration from the source test results. Because this condition supplements specific monitoring requirements stated elsewhere in this permit, no monitoring, reporting, or recordkeeping is required.

Condition 36, Certification

Legal Basis: Applies because the permit requires the Permittee to submit reports, and because the condition is a standard condition.

Factual Basis: This condition restates the regulatory requirement that all reports must be certified. To ease the certification burden, the condition allows the excess emission reports to be certified with the semi-annual operating report, although the excess emission reports must be submitted more frequently. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 37, Submittals

Legal Basis: Applies because the Permittee is required to send reports to the department.

Factual Basis: This condition merely specifies where submittals to the department should be sent. Receipt of the submittal at the correct department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping or reporting for this condition is needed.

Condition 38, Information Requests

Legal Basis: Applies to all Permittees, and incorporates a standard condition.

Factual Basis: Incorporates a standard condition in regulation, which tells the Permittee to submit information requested by the department. Receipt of the requested information is adequate monitoring.

Condition 39, Recordkeeping Requirements

Legal Basis: Applies to records required by a permit.

Factual Basis: The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide adequate evidence of compliance with this requirement, therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 40, Excess Emissions and Permit Deviation Reports

Legal Basis: Applies when the emissions or operations deviate from the requirements of the permit.

Factual Basis: This condition satisfies two regulatory requirements related to excess emissions—the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The condition does not mandate the use of the department's reporting form, but it does specify that the information listed on the form must be included in the report.

The reports themselves and the other monitoring records required under this permit provide an adequate monitoring of whether the Permittee has complied with the condition. Therefore, no additional monitoring, recordkeeping or reporting is required.

Condition 41, NSPS Reports

Legal Basis: Applies to facilities subject to NSPS and NESHAP federal regulations.

Factual Basis: The condition supplements the specific reporting requirements in 40 C.F.R. 60 and 40 C.F.R. 61. The permit does not need any monitoring, recordkeeping or reporting. The reports themselves are adequate monitoring for compliance with this condition.

Condition 42, Operating Reports

Legal Basis: Applies to all permits.

Factual Basis: The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit and does not need any monitoring, recordkeeping or reporting. The reports themselves are adequate monitoring for compliance with this condition.

Condition 43, Annual Compliance Certification

Legal Basis: Applies to all Permittees.

Factual Basis: This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Because this requirement is a report, no monitoring, recordkeeping or reporting is needed.

Conditions 44 - 50, Standard Conditions Not Otherwise Included in the Permit

Legal Basis: Applies to all operating permits.

Factual Basis: These are standard conditions required for all operating permits.

Condition 51, Permit As Shield from Inapplicable Requirements

Legal Basis: Applies because the Permittee has requested a shield for the applicable requirements listed under this condition.

Factual Basis: The permit condition sets forth the requirements that the department determined were not applicable to the facility, based on the permit application, past operating permit, construction permits and inspection reports.

Conditions 52 - 56, Visible Emissions and Particulate Matter Monitoring Plan

Legal Basis: Applies because these conditions detail the monitoring, recordkeeping, and reporting required in conditions 3 and 4.

Factual Basis: Each permit term and condition must include monitoring, recordkeeping and reporting for the Permittee to show verifiable compliance with each permit term and condition. The Permittee must establish by actual visual observations which can be supplemented by other means, such as a defined Facility Operation and Maintenance Program, that the facility is in continuous compliance with the State's emission standards for visible emissions and particulate matter.

These conditions detail a stepwise process for monitoring compliance with the State's visible emissions and particulate matter standards for liquid and gas fired sources. Equipment types covered by these conditions are internal combustion engines, turbines, heaters, boilers, and flares. Initial monitoring frequency schedules are established along with subsequent reductions or increases in frequency depending on the results of the self-monitoring program.

Reasonable action thresholds are established in these conditions that require the Permittee to progressively address potential visible emission problems from sources either through maintenance programs and/or more rigorous tests that will quantify whether a specific emission standard has been exceeded.

The seven months visible emissions data that the Permittee submitted to the department show compliance with the conditions to merit a reduced monitoring frequency of one Method 9 observations per year unless the criteria for annual observations in condition 52.1c are not met. In which case, the monitoring frequency shall be increased as set out in condition 52.1e.

Notification of the department via recordkeeping and reporting requirements are included in these conditions.

Conditions 52.2 through 52.5 were added to this permit to address specific CVEA's concerns in regards to Source ID 1.